



## Complete Summary

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### GUIDELINE TITLE

Urinary incontinence.

### BIBLIOGRAPHIC SOURCE(S)

American Medical Directors Association (AMDA). Urinary incontinence. Columbia (MD): American Medical Directors Association (AMDA); 1996. 16 p. [41 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Urinary Incontinence

### GUIDELINE CATEGORY

Diagnosis

Evaluation

Treatment

### CLINICAL SPECIALTY

Geriatrics

### INTENDED USERS

Advanced Practice Nurses

Allied Health Personnel

Nurses

Pharmacists

Physicians  
Social Workers

#### GUIDELINE OBJECTIVE(S)

- To improve the quality of care delivered to patients in long-term care facilities
- To guide the diagnosis and management of urinary incontinence in older adults residing in the nursing home

#### TARGET POPULATION

Elderly individuals and/or residents of long-term care facilities

#### INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis:

- Focused history
- Targeted examination to detect reversible and contributing factors, including rectal exam and pelvic exam in women
- Bladder record or voiding diary to characterize the incontinence
- Optional tests, as appropriate (e.g., urinalysis; urine culture and sensitivity; glucose and calcium; vitamin B-12; urine cytology; post-void residual determination; urodynamic tests)

Treatment:

- 3- to 5-day trial of a toileting program such as prompted voiding or timed voiding
- Behavioral therapies, such as bladder training and pelvic muscle exercises
- Drug therapies include anticholinergic/bladder relaxants (for urge incontinence), alpha-adrenergic antagonists and estrogen (for stress incontinence), and alpha-adrenergic antagonists (for incontinence in men suspected of having benign prostatic hypertrophy). Refer to the guideline document for dosing information.
- Surgical treatment
- Electrical stimulation
- Pads and external collection devices
- intravaginal supportive devices (e.g., pessary)
- Intermittent catheterization, chronic indwelling catheters

#### MAJOR OUTCOMES CONSIDERED

- Continence
- Quality of life

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)  
Hand-searches of Published Literature (Secondary Sources)  
Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer relied on the references listed in the Agency for Health Care Policy and Research's 1996 guideline, "Urinary incontinence in adults: acute and chronic management," as well as references identified via additional Medline searches, pertinent journal articles, and knowledge of current practice.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The guideline was developed by an interdisciplinary work group using a process that combined evidence- and consensus-based thinking. The groups were composed of practitioners involved in patient care in the institutional setting. Using pertinent articles and information and a draft outline, the group worked to make a simple, user-friendly guideline that focused on application in the long term care institutional setting.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

External Peer Review  
Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

All AMDA clinical practice guidelines undergo external review. The draft guideline is sent to approximately 175+ reviewers. These reviewers include AMDA physician members and independent physicians, specialists, and organizations that are knowledgeable of the guideline topic and the long-term care setting.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The steps involved in addressing urinary incontinence were summarized by NGC:

#### I. Recognition

##### Step 1

- Ascertain if the patient has a history of urinary incontinence

##### Step 2

- Evaluate the patient for signs and symptoms of urinary incontinence
- General signs and symptoms include:
  - Clothes or adult diaper wet
  - Bed wetting
  - Direct observation of urine loss
- Specific signs and symptoms include:
  - Urge: leakage after a precipitant urge to urinate
  - Stress: leakage coincident with increases in intraabdominal pressure (e.g., coughing, sneezing, bending)
  - Mixed: symptoms and/or signs of both stress and urge
  - Other: constant dribbling, leakage without warning
- Associated signs and symptoms include:
  - Irritative: frequency, urgency, nocturia
  - Obstructive: hesitancy, weak stream, straining to void

##### Step 3

- Evaluate for the presence of risk factors and document findings in the medical record

- Risk factors include:
  - Impaired mobility
  - Impaired cognitive function
  - Neurological disorders
- Patients at risk for urinary incontinence should be considered for preventive measures including providing an easily accessible toilet, frequent reminders to toilet and toileting assistance if needed, plus adequate fluid and fiber intake
- The patient's continence status should be assessed at least quarterly and the results documented on the Minimum Data Set (MDS) quarterly review form

## II. Diagnosis

### Steps 4-5

1. If incontinence was assessed previously, the results of that evaluation, if available, should be reviewed by the interdisciplinary team for the appropriateness of the diagnosis and treatment plan. If the diagnosis and treatment plan are viewed as appropriate, then the plan should be implemented. If not, the plan should be modified.

### Step 6-8

- A focused history and targeted examination should be done in order to detect reversible and contributing factors, as per the Resident Assessment Protocol (RAP) on Incontinence.
  - Possible reversible factors include: patient conditions (delirium, fecal impaction, depression, symptomatic urinary tract infection (UTI), edema), environmental conditions (impaired mobility, lack of access to a toilet, restraints, restrictive clothing), excessive beverage intake, disease (diabetes, Parkinson's disease and other neurological diseases that affect motor skills), and/or medications (e.g., diuretics, drugs that stimulate or block the sympathetic nervous system, or psychoactive medications)
  - Other contributing factors include: patient conditions (pain, excessive or inadequate urine output; atrophic vaginitis; cancer of the bladder or prostate; urethral obstruction; disorders of the brain or spinal cord; tabes dorsalis); abnormal lab values (elevated blood glucose or calcium)
- Decide if a work-up should be performed and is appropriate. A work-up may not be indicated if the patient has a terminal or end-stage condition, if the information gained would not change the management course, or if the patient refuses treatment. Always weigh the burden of the work-up against the potential benefits of the treatment.
- Assessment of incontinent patients:
  - Recommended for all patients
    - Identification of potentially reversible and contributing factors by performing a focused history, use of a bladder record or voiding diary and a targeted physical examination, including rectal exam and pelvic exam in women

- Optional tests as appropriate
  - Urinalysis
  - Urine culture and sensitivity
  - Glucose, calcium
  - Vitamin B-12
  - Urine cytology
  - Post-void residual determination
  - Urodynamic tests (e.g., stress tests, and filling and voiding cystometry)

#### Steps 9-10

5. If incontinence persists, then determine the appropriateness of further assessment. Further assessment should be undertaken only if the results will help further determine treatment

#### Step 11

6. If assessment is indicated, it might include a post-void residual (PVR) determination for anyone at risk for urinary retention.
7. Where available, ultrasound by trained personnel rather than urinary catheterization is recommended for the initial determination of post-void residual, but either one is an acceptable option

### II. Treatment

#### Steps 12-16

- A 3- to 5-day trial toileting program such as prompted voiding or timed voiding is recommended as the initial treatment approach
- Patients who respond favorably should be continued on the toileting program. Patients who do not respond favorably should be referred for other treatment options, including behavioral therapy, drug therapy, surgical treatment, electrical stimulation, intravaginal support devices, pads and external collection devices, intermittent catheterization, and/or chronic indwelling catheters
- Drug therapies include anticholinergics/bladder relaxants (for urge incontinence), alpha-adrenergic antagonists and estrogen (for stress incontinence), and alpha-adrenergic antagonists (for incontinence in men suspected of having benign prostatic hypertrophy)
- Drug therapy should be initiated at the smallest recommended dose and slowly titrated upwards, based on patient response and tolerance.

### II. Monitoring

#### Step 17

5. Incontinent patients should be monitored regularly for:
  - Responsiveness to treatment, using an objective measure of the severity of urinary incontinence such as systematic recordings (a bladder record)
  - Patient satisfaction with treatment
  - Side effects of treatment

## CLINICAL ALGORITHM(S)

A clinical algorithm is provided that summarizes the steps involved in addressing urinary incontinence, including recognition, diagnosis, treatment, and monitoring the condition.

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline was developed by an interdisciplinary work group using a process that combined evidence- and consensus-based thinking. Scientific research in the long-term care setting is scarce, and the majority of recommendations are based on the expert opinion of practitioners in the field.

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Effective treatment of urinary incontinence
- Improved quality of life and functional status

### POTENTIAL HARMS

1. Anticholinergics and/or tricyclic antidepressants (TCAs) for treating urge incontinence may cause dry mouth, visual disturbances, constipation, dry skin, and/or confusion. TCAs may also result in orthostatic hypotension and cardiac dysrhythmia.
2. Alpha-adrenergic agonists for stress incontinence can cause anxiety, insomnia, agitation, respiratory difficulty, sweating, cardiac dysrhythmia, hypertension, tremor.
3. Estrogen replacement can result in headache, spotting, edema, breast tenderness and/or possible depression.
4. Imipramine may worsen cardiac conduction abnormalities, postural hypotension and/or anticholinergic effects.
5. Alpha-adrenergic antagonists for treatment of overflow can cause postural hypotension, dizziness, vertigo, heart palpitations, edema, headache and/or anticholinergic effects.

Subgroups Most Likely to Be Harmed:

1. Alpha-adrenergic agonists should be avoided in obstructive syndromes and/or hypertension.
2. Estrogen replacement should be avoided in patients with suspected or confirmed breast or endometrial cancer, active or past thromboembolism with past oral contraceptive, estrogen therapy, or pregnancy.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

This clinical practice guideline is provided for discussion and educational purposes only and should not be used or in any way relied upon without consultation with and supervision of a qualified physician based on the case history and medical condition of a particular patient. The American Medical Directors Association and the American Health Care Association, their heirs, executors, administrators, successors, and assigns hereby disclaim any and all liability for damages of whatever kind resulting from the use, negligent or otherwise, of this clinical practice guideline.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

The implementation of this clinical practice guideline (CPG) is outlined in four phases. Each phase presents a series of steps, which should be carried out in the process of implementing the practices presented in this guideline. Each phase is summarized below.

- I. Recognition
  - Define the area of improvement and determine if there is a CPG available for the defined area. Then evaluate the pertinence and feasibility of implementing the CPG
- II. Assessment
  - Define the functions necessary for implementation and then educate and train staff. Assess and document performance and outcome indicators and then develop a system to measure outcomes
- III. Implementation
  - Identify and document how each step of the CPG will be carried out and develop an implementation timetable
  - Identify individual responsible for each step of the CPG
  - Identify support systems that impact the direct care
  - Educate and train appropriate individuals in specific CPG implementation and then implement the CPG
- IV. Monitoring
  - Evaluate performance based on relevant indicators and identify areas for improvement
  - Evaluate the predefined performance measures and obtain and provide feedback

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Living with Illness

### IOM DOMAIN

Effectiveness  
Patient-centeredness



## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

American Medical Directors Association (AMDA). Urinary incontinence. Columbia (MD): American Medical Directors Association (AMDA); 1996. 16 p. [41 references]

### ADAPTATION

The guideline is based on the U.S. Agency for Health Care Policy and Research's 1996 guideline (Urinary incontinence in adults: acute and chronic management. Rockville [MD]: U.S. Department of Health and Human Services, Public Health Service, AHCPR; 1996 Mar. [Clinical practice guideline; no. 2 (update)]). Recommendations are adapted to focus on application in the long-term care institutional setting.

### DATE RELEASED

1996 (reviewed Jan 2001, 2002 and 2003)

### GUIDELINE DEVELOPER(S)

American Medical Directors Association - Professional Association

### SOURCE(S) OF FUNDING

The guideline was funded by educational grants from Bristol-Meyers Squibb, Glaxo Wellcome, and Merck & Company.

### GUIDELINE COMMITTEE

Steering Committee

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Members: Janice Feinberg, PharmD, JD; Janet George, RN; George T. Grossberg, MD; Jerry Johnson, MD; Larry W. Lawhorne, MD, CMD; Steven Levenson, MD, CMD; Joseph G. Ouslander, MD, CMD, AGS Fellow; Susan Pettey, JD; George Taler, MD

### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

### GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, this guideline was reviewed by the original Steering Committee and is still considered to be current as of Jan 2004. This review involved new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

## GUIDELINE AVAILABILITY

Print and CD-ROM copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: [www.amda.com](http://www.amda.com).

## AVAILABILITY OF COMPANION DOCUMENTS

The following companion document is available:

- Guideline implementation: clinical practice guidelines. Columbia, MD: American Medical Directors Association, 1998, 28 p.

Print and CDROM copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044. Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: [www.amda.com](http://www.amda.com).

The guideline developers recommend that the guideline should be used in conjunction with the "Nursing Facility Minimum Data Set and Resident Assessment Instrument" (MDS/RAI), as well as with appropriate "Resident Assessment Protocols" (RAPs).

These tools are available from the U.S. Health Care Financing Administration (HCFA), 7500 Security Boulevard, Baltimore, Maryland 21244; Telephone: (410) 786-3000; Web site: [www.hcfa.gov](http://www.hcfa.gov).

## NGC STATUS

This summary was completed by ECRI on July 12, 1999. The information was verified by the American Medical Directors Association as of August 8, 1999.

## COPYRIGHT STATEMENT

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